

BUSINESS MEETING  
BEFORE THE  
CALIFORNIA ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

In the Matter of: )  
 )  
Business Meeting )  
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CALIFORNIA ENERGY COMMISSION  
HEARING ROOM A  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA

WEDNESDAY, FEBRUARY 23, 2011

10:00 A.M.

Reported by:  
Barbara J. Little

CALIFORNIA REPORTING, LLC  
52 LONGWOOD DRIVE  
SAN RAFAEL, CA 94901  
415-457-4417

COMMISSIONERS PRESENT

Robert B. Weisenmiller, Chairperson

James D. Boyd

Jeffrey D. Byron

Karen Douglas

STAFF AND CONTRACTORS PRESENT

Thom Kelly, Assistant Executive Director

Michael Levy, General Counsel

Harriet Kallemeyn, Secretariat

Jennifer Jennings, Public Adviser

Dale Chisum, CEC

Tovah Ealey, CEC

Linda Schrupp, CEC

Andy Panson, Air Resources Board

Tobias Muench, CEC

Dan Gallagher, CEC

Paul Bunje, UCLA

Mike McCoy, UC Davis

Joe O'Hagan, CEC

David Effross, CEC

Reynaldo Gonzalez, CEC

David Weightman, CEC

Paul Roggensack, CEC

Avtar Bining, CEC

Diana Chong, CEC

# I n d e x

Page

## Proceedings

### Items

1.	CONSENT CALENDER	5
a.	Pacific Storage Company	
b.	City of Pismo Beach	
c.	City of Burlingame	
d.	City of Morro Bay	
e.	KEMA, Inc.	
f.	Affordable Comfort, Inc.	Deferred
g.	California Commissioning Collaborative	Deferred
h.	New Buildings Institute, Inc.	Deferred
i.	Sacramento Municipal Utilities District	
j.	University of Missouri, Columbia	
k.	California State Controller's Office	
l.	Robert J. Watson Enterprises, Inc. dba Resolution	
m.	CTG Energetics, Inc.	
2.	Shandam Consulting - Dale Chisum	5
3.	Enterprise Networking Solutions - Dale Chisum	10
4.	BR Laboratories, Inc. - Tovah Ealey	12
5.	California Air Resources Board - Linda Schrupp	17
6.	Sacramento Municipal Utility District	Deferred

# I n d e x

	Page
7. University of California (Irvine Campus) Tobias Muench	23
8. University of California, Los Angeles Dan Gallagher, Paul Bunje, Mike McCoy	27
9. University of California, Davis - Joe O'Hagan	39
10. University of California, Merced - David Effross	43
11. University of California - Reynaldo Gonzalez	47
12. Stanford University - David Weightman	48
13. PAX Scientific, Inc. - Paul Roggensack	53
14. Seamicro Incorporated - Paul Roggensack	56
15. Electric Power Group, LLC - Avtar Bining	60
16. Southern California Edison - Diana Chong	65
17. San Diego Gas and Electric - Diana Chong	72
18. Pacific Gas and Electric Company - Diana Chong	73
19. Deferred	
20. Minutes: Possible approval of February 2, 2011 Business Meeting Minutes	74
21. Commission Committee Presentations and Discussion	
22. Chief Counsel's Report	84
23. Executive Director's Report	84
24. Public Adviser's Report	87
25. Public Comment	87
Adjournment	87
Certificate of Reporter	88

3 CHAIRPERSON WEISENMILLER: Good morning. Let's  
4 start the Business Meeting with the Pledge of Allegiance.

5 (Whereupon the Pledge of Allegiance was  
6 recited in unison.)

7 CHAIRPERSON WEISENMILLER: Good morning. Let's  
8 start with the Consent Calendar.

9 COMMISSIONER BYRON: Move approval of Consent  
10 Calendar.

11 COMMISSIONER DOUGLAS: Second.

12 CHAIRPERSON WEISENMILLER: All in favor?  
13 (Ayes.)

14 CHAIRPERSON WEISENMILLER: Okay. Let's go to Item  
15 2, the Shandam Consulting. Possible approval of Purchase  
16 Order Number 10-409.00-005 for \$29,700 to Shandam  
17 Consulting, Inc. to assist in the planning and  
18 implementation of the network connectivity between the  
19 Energy Commission and the Resource Agency Data Center.

20 Dale.

21 MR. CHISUM: Yes. Good morning, Chairman and  
22 Commissioners. My name's Dale Chisum and I'm presenting for  
23 both Items 2 and 3 today, on the agenda.

24 For Item 2 I'm seeking approval for the Energy  
25 Commission to enter into an agreement with Shandam to

1 provide the necessary networking knowledge and expertise to  
2 assist in the planning and implementation of the network  
3 connectivity between the Energy Commission and the Resource  
4 Agency Data Center.

5 This network connectivity is necessary to meet the  
6 directives of the California Technology Agency and the  
7 California Natural Resource Agency.

8 This agreement resulted from a CMAS request for  
9 offer.

10 These services will be used to implement network  
11 connectivity between the Energy Commission and Resource  
12 Agency Data Center to ensure all necessary networking  
13 equipment is configured, testing and working properly,  
14 mentor and train Energy Commission IT staff, and provide all  
15 necessary documentation for the project.

16 I can answer any questions at this time.

17 CHAIRPERSON WEISENMILLER: Question?

18 COMMISSIONER BOYD: Yes. Dale, you mentioned  
19 this -- well, you're mentioned you're here to represent both  
20 Items 2 and 3, and we're acting on Item 2.

21 MR. CHISUM: Yes.

22 COMMISSIONER BOYD: But when I read these, I  
23 realized they work in concert so --

24 MR. CHISUM: That's correct.

25 COMMISSIONER BOYD: -- we're going to spend

1 roughly \$100,000 in this process of following out the  
2 mandate that we received and have no choice about.

3 MR. CHISUM: That's correct.

4 COMMISSIONER BOYD: Do you ever visualize a return  
5 on investment sufficient to amortize this hundred thousand  
6 dollars on the front end? Will there be savings somewhere  
7 down the road from this "consolidation for efficiency's  
8 sake?"

9 MR. CHISUM: The --

10 COMMISSIONER BOYD: I hate to put you on the spot  
11 like this.

12 MR. CHISUM: Sorry. Theoretically, as we  
13 consolidate there will be economies of scale and reduction  
14 in energy use because we'll be reducing square footage of  
15 data centers throughout the State, so that's the theory  
16 behind it.

17 COMMISSIONER BOYD: Will we --

18 MR. CHISUM: There will be some up front costs  
19 but, eventually, there will be a savings.

20 COMMISSIONER BOYD: Otherwise, you take this  
21 equipment out of our basement which is, I'm sure wonderful,  
22 office space for somebody some day.

23 MR. CHISUM: Yeah.

24 COMMISSIONER BOYD: And move it. We'll realize  
25 some savings. I guess I'm --

1 MR. CHISUM: Well, we'll be --

2 COMMISSIONER BOYD: Pardon me, but I'm kind of

3 cynical.

4 MR. CHISUM: -- be decommissioning our data

5 center, so we'll be reducing the energy usage, and the air

6 conditioning, and other.

7 COMMISSIONER BOYD: Oh, very good.

8 MR. CHISUM: But it will be -- but they'll be

9 using electricity and air conditioning across the street.

10 COMMISSIONER BOYD: Right. Pardon my cynicism,

11 but I've been around so long that I've seen the

12 consolidation, de-consolidation, reconsolidation of things

13 like this --

14 MR. CHISUM: Right.

15 COMMISSIONER BOYD: -- through my working lifetime

16 and I'm kind of a skeptic about consolidations ending up

17 being a better deal. But I realize it's -- we have no

18 choice.

19 MR. CHISUM: That's correct.

20 COMMISSIONER BOYD: Thank you.

21 MR. CHISUM: Sure.

22 COMMISSIONER DOUGLAS: Do we have a motion on this

23 item? Commissioner Byron?

24 COMMISSIONER BYRON: A quick question, if I may.

25 I didn't see this in here. Are other -- are other



1 organizations within the Resources Agency doing the same  
2 thing?

3 MR. CHISUM: That's correct.

4 COMMISSIONER BYRON: Okay, thank you.

5 MR. CHISUM: We're one of the first agencies to  
6 move to their data center, that's outside of the building,  
7 across the street. Because already the Water -- Water  
8 Resources is there, and Fish and Game, and we're -- us and  
9 CCC, and I can't remember who else, but a couple others are  
10 moving over, too.

11 COMMISSIONER DOUGLAS: I didn't have a question, I  
12 was going to move the item.

13 But Commissioner Weisenmiller did you have  
14 something?

15 I'll move approval.

16 COMMISSIONER BYRON: Second.

17 CHAIRPERSON WEISENMILLER: All in favor?

18 (Ayes.)

19 CHAIRPERSON WEISENMILLER: Before we go onto Item  
20 3 we need to establish -- re-establish the line for the  
21 conference call-in, so WebEx.

22 (Brief pause for technical adjustments.)

23 COMMISSIONER BOYD: Some irony involved with Dale  
24 being up here, watching us have a little fault with our  
25 system.

1                   CHAIRPERSON WEISENMILLER:   It's good music.

2                   (WebEx is re-established.)

3                   CHAIRPERSON WEISENMILLER:   We've just re-  
4 established the connection.   We just approved Item Number 2,  
5 four to zero, and going on to Item Number 3.

6                   Okay, so Item Number 3 is Enterprise Networking  
7 Solutions.   Possible approval of Purchase Order Number 10-  
8 409.00-006 for \$70,000 to Enterprise Networking Solutions to  
9 assist in the planning and implementation of a server  
10 migration from the energy Commission's current data centers  
11 to the Resource Agency Data Center.

12                  Dale, do you want to discuss this?

13                  MR. CHISUM:   Sure.   I am seeking your approval for  
14 the Energy Commission to enter into an agreement with  
15 Enterprise Networking Solutions to provide the necessary IT  
16 knowledge and expertise to assist in the planning and  
17 implementation of a successful server migration from the  
18 Energy Commission's current data centers to the Resource  
19 Agency Data Center.

20                  This data center migration is necessary to meet  
21 the mandates and directives of the California Technology  
22 Agency and the California Natural Resources Agency.   This  
23 agreement resulted from a CMAS request for offer.

24                  These services will be used to provide the  
25 necessary IT expertise and skills to assess, identify, and

1 recommend strategies for migrating servers, while minimizing  
2 disruption to Energy Commission staff productivity,  
3 implement -- be used to implement the migration of all  
4 identified servers from the Energy Commission's data centers  
5 to the Resource Agency Data Center.

6 It will ensure all servers are configured, tested  
7 and working properly once migrated. It will assist, mentor  
8 and train Energy Commission IT staff and provide all  
9 necessary documentation for the project.

10 Any questions, I'd be happy to answer them.

11 COMMISSIONER BOYD: Let's see, I do have another  
12 question that just dawned on me. This is not a surprise to  
13 many of us, I'm sure we've heard about this is in committee  
14 meetings and what have you, this transfer to the data  
15 center.

16 But I do recall a discussion in one of -- one of  
17 our committee meetings, I believe it was Transportation,  
18 about concerns about security issues associated with this  
19 transfer and our ability to protect the confidentiality that  
20 we promised people, and so on and so forth.

21 Dale, has that been resolved to your satisfaction?  
22 It has?

23 MR. CHISUM: Yes.

24 COMMISSIONER BOYD: All right. Thank you.  
25 I'll move approval, reluctantly.

1 COMMISSIONER DOUGLAS: Second.

2 CHAIRPERSON WEISENMILLER: All in favor?

3 (Ayes.)

4 MR. CHISUM: Thank you.

5 CHAIRPERSON WEISENMILLER: So, Item Number 4, BR

6 Laboratories, Inc. Possible approval of Amendment 1 to

7 Contract 400-08-003 with BR Laboratories, to add \$173,394

8 and a two-year time extension to continue Appliance

9 Standards Enforcement testing of Title 20-regulated

10 appliances listed in the current contract.

11 Tovah?

12 MS. EALEY: Yes. Good morning, Mr. Chairman and

13 Commissioners. I'm Tovah Ealey, from the California Energy

14 Commission's Appliance Efficiency Program.

15 I work on the enforcement side and this is an

16 enforcement testing contract.

17 I'm requesting for the approval to extend the

18 contract another two years, add additional funding so that

19 we can continue doing the enforcement testing that we've

20 been doing for the prior two years.

21 The testing is done in order to confirm the energy

22 efficiency claims of manufacturers who certify their

23 products to the Energy Commission, to prove or disprove

24 allegations made by one manufacturer against another of

25 energy efficiency. And, also, to support enforcement

1 actions taken against manufacturers or sellers of  
2 noncompliant products.

3 If you have any questions, I'd be happy to answer  
4 them.

5 COMMISSIONER BYRON: Ms. Ealey, I recall earlier  
6 this year that we had some concerns about the independence  
7 of these testing contractors because there's not very many  
8 of them around. And, in fact, I believe in the proceeding  
9 we opened we found out that it may have been this testing  
10 contractor that tests for other manufacturers, as well.

11 Have you resolved this concern with regard to how  
12 the public might perceive, you know, the conflict that's  
13 built into this kind of process?

14 MS. EALEY: Yes, we have. We are requiring our  
15 current contractor, BR Laboratories, to let us know if he  
16 has tested for a Title 20-regulated -- a manufacturer of a  
17 Title 20-regulated product within the last 12 months. And  
18 if he has to -- to let us -- to have another one of his  
19 staff members to do it, rather than himself.

20 He has a very small staff, but he can -- he has at  
21 least one other, I think, technician, lab technician that  
22 can perform the test.

23 But that was resolved earlier, earlier in 2010, I  
24 believe.

25 COMMISSIONER BYRON: Okay. All right. So, that's

1 within the same company that we've got a technician and a  
2 company owner basically putting up the wall between what the  
3 two of them are doing.

4 MS. EALEY: That's true.

5 COMMISSIONER BYRON: That may not be satisfactory.

6 MS. EALEY: I was advised by Dennis Beck, our  
7 legal, senior legal counsel that this was -- that this would  
8 work for us.

9 COMMISSIONER BYRON: That's like what other  
10 options do we have, right?

11 MS. EALEY: Yeah.

12 COMMISSIONER BYRON: Okay. Well, obviously,  
13 you've thought about this and you've addressed it with  
14 counsel, so I'm satisfied.

15 Do you want to add anything, Mr. Levy? Okay.

16 MS. EALEY: The other alternative would be to  
17 contract out with several different testing companies, you  
18 know, one to test commercial refrigerators, one to test  
19 another type. But even then you might run into the same  
20 problem.

21 COMMISSIONER BYRON: Uh-hum. No, obviously, this  
22 is a very challenging thing to do and I know you,  
23 essentially, represent the enforcement arm of this agency.  
24 So, no, I think you do a great job.

25 But, maybe, Commissioners, we might want to

1 consider having Ms. Ealey carrying a gun, or something, so  
2 that she can do a better job of enforcement.

3 No. Thank you very much.

4 MS. EALEY: Thank you.

5 COMMISSIONER BOYD: Well, let me pile on here and  
6 ask Tovah to maybe be -- go into a little more detail why,  
7 for purposes of the record, if nothing else, and maybe  
8 members of the audience, why this is such an important  
9 thing, such a good thing? Because, you know, there will be  
10 people who criticize big brother, possibly, for delving into  
11 some of the areas here and I think we need to get on the  
12 record the positive attributes of this kind of activity.

13 So, if you wouldn't mind elaborating a little on  
14 that point?

15 MS. EALEY: Okay. This is -- this contract allows  
16 us to independently take a look at the values, the  
17 efficiency values, to do spot checking, as it were, for  
18 those models that are certified to us.

19 It also allows us to collect data for those  
20 appliance types for which we have no standard, yet. It  
21 allows us to -- for instance, commercial range tops, there  
22 is no efficiency standard as of yet.

23 But in testing models of range tops we can then  
24 gather the data and our engineers, in concert with PG&E case  
25 studies, can say here are the levels that we see, here are

1 the values that we see, a standard is needed or a standard  
2 is not needed.

3           If we get word from other agencies, from the  
4 Canadian -- our Canadian counterparts, from Energy Star,  
5 from DOE that there is a problem with a particular model or  
6 line of models, such as the LG refrigerators that came up  
7 last year, or year before last, or even the turbo air matter  
8 we had earlier, early in 2010 where someone reported that,  
9 you know, the efficiency levels that are being reported are  
10 all over the board, what's going on?

11           So, if we have them tested by an independent lab,  
12 not associated with the manufacturer, the integrity of our  
13 program will be preserved.

14           Our test lab purchases the appliance models from  
15 retailers or wholesalers, just as a consumer would, or a  
16 business owner would, and not directly from the lab, and  
17 that preserves the integrity of the testing.

18           There's no -- there's less of a chance that the  
19 models could be tampered with prior to the test. So, it's a  
20 very valuable tool that we have for enforcement.

21           COMMISSIONER BOYD: Thank you.

22           COMMISSIONER DOUGLAS: I have no further -- I have  
23 no questions on this item that haven't already been asked,  
24 so I'll move approval. I, obviously, strongly support  
25 independent testing of the efficiency of models that we



1 regulate.

2 COMMISSIONER BYRON: Second.

3 CHAIRPERSON WEISENMILLER: All in favor?

4 (Ayes.)

5 CHAIRPERSON WEISENMILLER: Thanks. Thank you.

6 MS. EALEY: Thank you, Commissioners.

7 CHAIRPERSON WEISENMILLER: Item Number 5 is the  
8 California Air Resources Board. Possible approval of  
9 Contract 600-10-005, for \$2 million with the California Air  
10 Resources Board for an Interagency Agreement to fund the  
11 Clean Vehicle Rebate program for qualified electric drive  
12 vehicles. This agreement will provide additional funding  
13 for electric rebates in a critical launch year for advanced  
14 vehicle technologies.

15 And I believe this is -- hello, Linda.

16 MS. SCHRUPP: Yes, hi. Good morning,  
17 Commissioners. I'm Linda Schrupp and I'm here today to  
18 present for your approval, hopefully, an interagency  
19 agreement with the Air Resources Board.

20 And it would be to augment their Clean Vehicle  
21 Rebate program, which has been a very high -- a very well-  
22 received program for incentivizing the purchases of plug-in  
23 hybrid electric vehicles and battery electric vehicles.

24 This interagency agreement would provide \$2  
25 million to fund freeway-capable, four-passenger electric

1 vehicles.

2 It's adding to an existing successful program and  
3 I urge your approval today.

4 If you have any questions at all?

5 COMMISSIONER BOYD: I have no questions. I would  
6 just comment that -- and commend staff. They've been  
7 working on this for a long time with the Air Resources Board  
8 and I'm glad to see it come here.

9 This, of course, was vetting in and discussed many  
10 times in the Transportation Committee, which I chair, and we  
11 recommended its approval and so recommend today.

12 So, if no one else has a question, I'd move  
13 approval.

14 CHAIRPERSON WEISENMILLER: Well, we actually have  
15 a spokesperson from the ARB to comment, too.

16 COMMISSIONER BOYD: Ah, very good. So, I'll hold  
17 the motion.

18 CHAIRPERSON WEISENMILLER: Okay.

19 MR. PANSON: Good morning, Commissioners. My name  
20 is Andy Panson, with the Air Resources Board. I'm the lead  
21 staff on our AB 118 Incentive Program, and I'm here to  
22 testify in support of your -- of the \$2 million interagency  
23 agreement.

24 We've been working very closely with the  
25 Commission on this and other elements of AB 118, and we

1 really appreciate your proposed investment to bring --  
2 that's going to help bring more electric vehicles to  
3 California.

4 This is a very exciting and critical juncture for  
5 the ED rollout. After, you know, kind of a lot of  
6 anticipation over the last year, we're really excited that  
7 we're going to see several thousand new zero emission  
8 vehicles on California's roadways this year, as a result of  
9 your -- your funding and ARB's funding.

10 We are already investing \$9 million to support  
11 that deployment. And even with that investment, we don't  
12 believe we'll be able to meet the near-term demand. So this  
13 \$2 million is very critical to us and to the program, and  
14 it's going to help fund about 400 additional vehicles.

15 And we think that with the combined funding,  
16 that's going to help us meet the demand through the middle  
17 of this year, third quarter of this year.

18 And we're going to, in our next AB 118  
19 appropriation, we're going to be -- we're anticipating  
20 making an additional substantial investment to continue the  
21 rollout beyond this year.

22 So, we really appreciate this funding. And I also  
23 want to acknowledge and thank you for the investments that  
24 you're making for the charging infrastructure because that's  
25 also an absolutely critical part of this. You can't just

1 have the vehicles without the complementary charging  
2 infrastructure.

3           So we support the approval of this -- this  
4 proposal, and we thank you for this investment and the other  
5 investments you've been making, and we look forward to  
6 continuing our collaborative implementation of this  
7 important program. Thanks a lot.

8           COMMISSIONER BOYD: Thank you.

9           CHAIRPERSON WEISENMILLER: I was going to ask if  
10 you could share with us, very briefly, sort of the numbers  
11 and the locations for the rollout. I mean, what's been the  
12 actual experience to date.

13           MR. PANSON: To date we've funded about 240  
14 vehicles. The funding has been available since about  
15 February of 2010, but in its initial rollout things were  
16 kind of slow until the Nissan Leaf became available.

17           So we -- we knew it was going to be slow to start  
18 with. We wanted to get out the money in front of the cars  
19 because you have to have the money there first.

20           But, really, since the Leaf has started coming to  
21 California, it's -- the money is really starting to flow.

22           So, as I said, we funded 240 vehicles to date.  
23 Our -- the funding that ARB has already committed would fund  
24 about 1,300 additional vehicles.

25           And we're -- based on our conversations with the

1 manufacturers and with some -- with commitments they've  
2 made, we expect there's going to be 2,000 vehicles that are  
3 going to come by the middle of the year, third quarter of  
4 this year.

5           So when you look at the vehicles we've funded to  
6 date, the money that your -- we hope you'll contribute, and  
7 the money that we have, that will get us to that 2,000  
8 figure.

9           We expect by the end of the year we might even see  
10 a thousand additional vehicles, for a total of 3,000 for the  
11 year. But we'll be able to fund those additional vehicles  
12 with the money that we hope our Board will approve in the  
13 middle of the year, with the budget that will be approved  
14 this July.

15           So, we're basically going from, you know, hundreds  
16 of vehicles on the road today to there's going to be  
17 multiple thousands by the end of the year, and I think  
18 that's a really exciting thing to look forward to.

19           CHAIRPERSON WEISENMILLER: Thank you.

20           COMMISSIONER BOYD: Mr. Chairman, I might -- since  
21 you opened that door a little bit, let me open it a little  
22 wider in terms of this activity is but one of a multitude of  
23 activities that are going on in this arena of electric  
24 vehicles.

25           You may recall that this agency, through the PIER

1 program over the past three years, provided for the  
2 establishment and operation of what was, initially, a plug-  
3 in hybrid electric vehicle center at UC Davis that conducted  
4 a lot of background research.

5           It's now been re-titled the plug-in -- the Plug-in  
6 Electric Vehicle Center, to take care of pure electrics, as  
7 well as the plug-ins.

8           And the work that was done by the Center was  
9 utilized by the Plug-In Electric Vehicle Collaborative that  
10 was formed late last year, a collaborative of government,  
11 and industry, and local agencies all involved with electric  
12 vehicles, the utilities, the auto manufacturers, and so on,  
13 and so forth, which just recently released a strategic plan  
14 that now guides all of the activities of our two agencies  
15 and many others, and tries to show a pathway to the future,  
16 which was predicated somewhat on the roadmap that was  
17 produced by our PIER Project.

18           So there are now a multitude of activities that  
19 demonstrate that electric vehicles are here, they're  
20 serious, they will be staying this time. The manufacturers  
21 are committed to them. No one is talking of crushing  
22 electric vehicles anymore, I trust. And we're seeing a very  
23 substantial launch, now, of public interest in this arena.

24           And I'm proud of this agency and the ARB, and  
25 others for having contributed to the success of a new, green

1 technology, with California in the forefront of it. So,  
2 this is just another small step in what has been a very long  
3 journey to this point.

4 COMMISSIONER DOUGLAS: Well, as a former member of  
5 the Transportation Committee in my first two years on the  
6 Commission, I'm very pleased to see the rollout of electric  
7 vehicles occurring about when the manufacturers said it  
8 would occur, and when it had expected it to occur. And also  
9 pleased to see the very close partnership with ARB, which is  
10 necessary to realize the State's goals in this area.

11 So, I'm in strong support. I'll defer to  
12 Commissioner Boyd, if he'd like to make a motion.

13 COMMISSIONER BOYD: Well, I'll now make my motion,  
14 thank you. Move approval.

15 COMMISSIONER DOUGLAS: Second.

16 CHAIRPERSON WEISENMILLER: All in favor?

17 (Ayes.)

18 COMMISSIONER BYRON: Thank you, Mr. Panson, for  
19 being here.

20 CHAIRPERSON WEISENMILLER: Yes.

21 MR. PANSON: Thank you.

22 CHAIRPERSON WEISENMILLER: Okay. Item Number 6  
23 has been deferred until the next agenda.

24 So, we're now at Item Number 7, UC California,  
25 Irvine Campus. For possible approval of Contract 600-10-002

1 for \$750,000 with the Regents of the University of  
2 California, Irvine Campus, to enhance the Spatially and  
3 Temporally Resolved Energy and Environmental Tool (STREET)  
4 model. Enhancements of the STREET model will expand its use  
5 from the South Cast Air Basin to multiple air basins/regions  
6 throughout California and permit an analysis of several  
7 emerging alternative fuel -- vehicle and fuel options.

8 Tobias.

9 MR. MUENCH: Good morning, Chairman, good morning,  
10 Commissioners.

11 I present to you, today, a possible -- for  
12 approval a possible interagency agreement between the Energy  
13 Commission and the Regents of the University of California  
14 at Irvine, over the STREET model -- enhancement of the  
15 STREET model, otherwise known as the Spatially and  
16 Temporally Resolved Energy and Environment Tool.

17 This is a model that has been -- it's a pre-  
18 existing model that's been developed over five years with  
19 PIER funding, mostly by UC Irvine. It's a very cutting edge  
20 model that allows for geospatial mapping and other affects  
21 of vehicle populations, and fueling station, fueling  
22 outlets, and other elements.

23 What the agreement will do is mainly two things.  
24 It would expand -- the model has previously concentrated on  
25 hydrogen, only, and on the South Coast Air Basin. And this



1 enhancement would expand the model to all of California and  
2 to all fuels that we deal with.

3           Let's see, excuse me. The Energy Commission would  
4 be providing \$750,000 for three years to do this work. And  
5 the benefits for the Commission and for our program, the AB  
6 118 program, would be the project's enhancement and  
7 expansion will expand the model to other alternative fuels  
8 and to other regions in California. It will address policy  
9 decisions regarding strategic placement of alternative fuel  
10 vehicles and alternative fuel distribution.

11           And the fuels considered currently would be  
12 electricity, hydrogen, ethanol, renewable and bio-based  
13 diesel, natural gas and propane, but the scope of work  
14 allows for expansion to other alternative fuels, as needed.

15           And another element would be that the work would  
16 create a web-based tool that would eventually be usable to  
17 all staff and stakeholders.

18           Any questions?

19           COMMISSIONER BOYD: No questions. Again, another  
20 comment. This, too, was vetted through the Transportation  
21 Committee, something we've talked about for a fairly long  
22 time and have deemed this a very valuable asset to help with  
23 the constant discussion of -- I would call it almost the  
24 chicken and egg situation, the fueling infrastructure versus  
25 the vehicles, and the vehicle rollout in trying to match

1 things in the most effective, efficient, and cost-effective  
2 way.

3 This tool has demonstrated itself to be very  
4 helpful in the fairly significant discussions we've had over  
5 a period of years about hydrogen vehicles, and the hydrogen  
6 fuel station. And the concept is applicable, as Tobias  
7 said, to the entire menu of alternative fuels that the AB  
8 118 program is helping facilitate.

9 So, we see this as something that will help us all  
10 in decision making, and more proper decision making with  
11 regard to the expenditure of our monies and the placement of  
12 infrastructure to match the plans of the manufacturers, in  
13 rolling out vehicles, and the desires of the consumers as  
14 they begin to acquire these vehicles.

15 So, again, it's seen as a very good piece of work  
16 by the folks at UC Irvine, and something we're anxious to  
17 see employed now.

18 So, I'll move approval if there are no other  
19 questions.

20 COMMISSIONER BYRON: And I'll second it, noting  
21 that it has another great acronym associated with it,  
22 STREET.

23 COMMISSIONER BOYD: They really had to work to get  
24 this one, I notice.

25 CHAIRPERSON WEISENMILLER: Okay. All in favor?

1 (Ayes.)

2 CHAIRPERSON WEISENMILLER: Thanks.

3 MR. MUENCH: Thank you.

4 CHAIRPERSON WEISENMILLER: Okay. We're now

5 looking at Item Number 8, University of California, Los

6 Angeles. Possible approval of Contract 500-10-033 for \$1

7 million with the Regents of the University of California,

8 Los Angeles, to create a comprehensive tool for evaluating

9 and analyzing regional energy use and its environmental and

10 socioeconomic impacts.

11 Dan Gallagher.

12 MR. GALLAGHER: Good morning, Chairman

13 Weisenmiller and Commissioners. My name is Dan Gallagher

14 and I am the Commission Contract Manager for the Methodology

15 to Develop Baselines for California Regions Project.

16 Working with Phil Misemer, Team Lead for PIER

17 Transportation, we are asking for approval of a 31-month

18 interagency agreement for \$1 million, with UCLA Institute of

19 the Environment.

20 There are currently no set of integrated tools and

21 methods to quantify the sustainability of California's

22 metropolitan regions. Baseline data is needed to measure

23 and quantify the comprehensive impacts of land use policies

24 and infrastructure investments.

25 This project will develop and pilot a

1 comprehensive tool. This tool will be used for both  
2 evaluating and quantifying regional -- regional energy use  
3 and the environmental impacts of land use patterns and  
4 policies to support the objectives of Senate Bill 375.

5 This tool combines the methodological elements of  
6 urban metabolism, life cycle assessment and the production,  
7 exchange, and consumption allocation system model, also  
8 known as PECAS, developed at UC Davis.

9 To support development of the comprehensive tool,  
10 the researchers will also develop standardized methods to  
11 determine regional sustainability. They will develop a set  
12 of performance indicators for assessing the impacts of  
13 energy use in California's regions.

14 They will update this PECAS model to include  
15 energy data and they're going to pilot this comprehensive  
16 tool in Los Angeles County to establish a regional energy  
17 baseline.

18 The researchers are going to partner with the Los  
19 Angeles Regional Climate and Sustainability Collaborative,  
20 also known as LARC, to pilot the methodology.

21 The baseline data derived from the tool will be  
22 used by LARC to develop a climate action sustainability plan  
23 for the Los Angeles region.

24 And this project is going to optimize the  
25 usability of the research products through a project

1 advisory committee to help ensure successful transition from  
2 research implementation.

3           The project is also going to leverage 900,000 in  
4 ARRA funds. We're coordinating with our CEC's Fuels and  
5 Transportation Division, Forecasting Unit, on the PECAS  
6 model work.

7           We received four letters of support for this  
8 project, one from the Attorney General's Office, one from  
9 the San Francisco Municipal Transportation Authority, one  
10 from the Los Angeles Regional Collaborative, also known as  
11 LARC, and one from Chairman Mary Nichols, from the  
12 California Air Resources Board.

13           And I'll end my presentation today by quoting an  
14 excerpt from Chairman Mary Nichols' letter of support. She  
15 said, and I quote, "This project will support the efforts of  
16 the California Air Resources Board and other state and local  
17 decision makers in implementing policies, like AB 32 and SB  
18 375."

19           And with me today, I have Dr. Paul Bunje, from  
20 UCLA Institute of the Environment, and Mr. Mike McCoy, from  
21 UC Davis, Urban Land Use and Transportation Center. And  
22 they're available to answer any specific questions on the  
23 research or on the PECAS model. Thank you.

24           CHAIRPERSON WEISENMILLER: Yeah, I was going to  
25 invite both of them up to the dais so they can say a few

1 words.

2 DR. BUNJE: Thank you for having us today,  
3 Commissioners. Good morning, my name is Paul Bunje, from  
4 the UCLA Institute of the Environment and Sustainability.

5 This is a product of a substantial amount of work  
6 that the PIER program has already invested in and it's  
7 leading towards what we believe are going to be some  
8 substantial gains in the ability for decision makers to  
9 assess total energy inputs and outputs associated with  
10 economic activity in California's major regions.

11 As you heard, its intention is to start to combine  
12 and integrate a suite of distinct models and methodologies  
13 that already have the capacity for quantifying critical  
14 aspects of our energy systems, but done in such a way and in  
15 direct collaboration and consultation with public decision  
16 makers at different levels through the State, that it will  
17 allow us to pursue and achieve some of the objectives that  
18 are, frankly, quite ambitious and necessary, associated with  
19 bills like AB 32 or SB 375.

20 We're very keen to collaborate with you all as  
21 closely as possible and ensure that this work really is  
22 usable and demonstrates the capacity of California to  
23 continue to lead on really, really innovative research  
24 products that lead to benefits for our citizens.

25 And I'd be happy to answer any questions about the

1 details and sort of geek out a little bit, if you want, but  
2 I don't have to do that either, so --

3 CHAIRPERSON WEISENMILLER: I was going to ask a  
4 question.

5 DR. BUNJE: Sure.

6 CHAIRPERSON WEISENMILLER: Obviously, one of the  
7 recent events was the election of Governor Brown, and he has  
8 put a very high priority on distributed gen.

9 DR. BUNJE: Yeah.

10 CHAIRPERSON WEISENMILLER: And there seems to be a  
11 lot of interest at a local level on distributed gen. So, I  
12 wanted to just touch base on how well that's integrated into  
13 your modeling activity.

14 DR. BUNJE: It's directly integrated. In fact,  
15 one of the keys of this, particularly the urban metabolism  
16 framework, is that it's meant to assess not only energy  
17 inputs to systems, to communities, or cities, for instance,  
18 but also the native or in situ capacity for these  
19 generation.

20 And then relate that to the existing land use  
21 patterns and local and state policy that will either allow  
22 or provide barriers to the rollout of various distributions.

23 So, it essentially is meant to analyze the things  
24 like utility -- utility infrastructure, and grid  
25 infrastructure, land use policies, including things like

1 zoning and the like, as well as economic incentives and  
2 barriers that might allow for some of this generation to  
3 occur.

4           One other related aspect that Dan Gallagher  
5 mentioned is the leveraging of ARRA funds. One aspect,  
6 about half of that project is going towards a very detailed,  
7 high resolution climate model for Southern California, one  
8 piece of which is actually going to include very, very high  
9 resolution of renewable resources, renewable energy  
10 resources in Southern California such that -- under various  
11 scenarios of climate change in the future.

12           So, there's also leverage of interesting capacity  
13 for producing even further resources associated with  
14 distributed generation in very, very narrow bands which, in  
15 theory, should support the economic rollout of some of  
16 these -- some of these new technologies.

17           COMMISSIONER BOYD: I was just going to thank you  
18 for being here and for your comments. And just comment that  
19 we've debated this project internally for a long, long time,  
20 as it was being shaped, and formed and finally resolved into  
21 the form we see in front of us today.

22           And you made interesting comments about how  
23 previous work by PIER contributed to the ability to carry  
24 forward with a project like this that, to me, addresses  
25 what -- a component of, if not a substantial piece of that



1 third leg of the energy stool we always talk about, that's  
2 been so neglected, historically.

3 And with regard to land use and the integration of  
4 land use and transportation planning, and just the whole  
5 integration of local planning into the whole debate and into  
6 the equations about the decisions we'd make.

7 And I think I might solicit you to make some  
8 comments or provide some comments, as positive as you've  
9 made here today, to Senator Padilla, and his office, who  
10 seems to have a keen interest in our PIER program, and I  
11 think has some credentials that tie into UCLA, and he might  
12 be pleased to know about this activity. And it would be a  
13 great favor to this institution.

14 DR. BUNJE: We've been in contact with Senator  
15 Padilla and his staff --

16 COMMISSIONER BOYD: Excellent.

17 DR. BUNJE: About precisely these issues, yeah.

18 COMMISSIONER BOYD: Thank you very much. Anyway,  
19 this, to me, is a great project and I appreciate your  
20 working on it, as well as your testimony here today.

21 COMMUNICATIONS DIRECTOR WILCOX: So, I also really  
22 appreciate you being here and hearing from you. This sounds  
23 like a really interesting project.

24 And what I wanted to ask you is if you could  
25 describe some more of the relationship between the

1 analytical work and the modeling work that this involves,  
2 and also LARC, some of the more community-wide initiatives  
3 and organizing around SB 375, and around Los Angeles climate  
4 impacts and climate goals.

5 DR. BUNJE: Well, with respect to integrating  
6 various models, one of the -- one of the challenges, of  
7 course, is that when developing quantitative models, or  
8 other various tools, like life cycle assessment, it's  
9 difficult sometimes to identify the ways in which either the  
10 metrics or the outcomes of those things can relate in a  
11 coherent manner.

12 That's part of the purpose of the urban metabolism  
13 framework is to actually identify appropriate tools that can  
14 be used, things like PECAS, that I can let Mike talk to you  
15 about in a little bit more detail.

16 Or, life cycle assessments, particular material  
17 costs or particular energy -- energy demand models, for  
18 instance, and where additional production of that energy  
19 might occur, such that you can assess, essentially, the  
20 total embedded and existing energy that might be a function  
21 of particular aspects, be it a transportation system, be it  
22 the electricity system, be it how you -- how distributed  
23 generation can further impact further upstream baseload  
24 generating facilities, and things like that.

25 And so, essentially, that's part of the

1 development of this project is how best to integrate those  
2 models in a way that is quantitatively valid and also  
3 understandable and useable.

4           And that relates, essentially, to the second sort  
5 of part of your question which is how do you deal with lots  
6 of technical information that's difficult, potentially, to  
7 prioritize, or assess, or deal with if you're a local  
8 decision maker, or even a regional decision maker when  
9 you've got lots of things you might be addressing.

10           One of the reasons we're partnering so closely  
11 with LARC, the Los Angeles Regional Collaborative, is  
12 because it's a unique organization that has come together.  
13 It includes the County of Los Angeles, the City of Los  
14 Angeles, the Metropolitan Transport Authority, a number of  
15 other cities, Santa Monica, Council of Governments, some  
16 nonprofit organizations, UCLA, that are really trying to  
17 share best practices and information according to these  
18 things.

19           One of the values is utilizing institutions, like  
20 UCLA, or native expertise in those agencies, you can assess  
21 what the most appropriate -- what the most appropriate data  
22 is for particular sets of decisions.

23           And so when planning regional -- regional climate  
24 efforts, you need a way to balance, you know, something that  
25 might come out of PECAS, or something that might come out of

1 a STREET tool, for instance, when making particular  
2 decisions.

3 That's a complex thing to do unless you have  
4 access to people who understand the various relationships  
5 and a forum in which you can debate and assess them.

6 And so that's exactly what LARC is meant to do.  
7 LARC is housed at the Institute of the Environment and  
8 Sustainability, and part of the reason for that is so that  
9 it has direct access to that type of academic expertise  
10 which is, frankly, a rarity for many local decision making  
11 bodies. And it gives us the ability, essentially, to  
12 directly negotiate with them.

13 At the same time it means our -- it means, in my  
14 opinion, anyway, the research is a lot better because we're  
15 not doing it as ivory tower, disinterested folks, we're  
16 doing it in direct response to what the decision makers need  
17 to respond to.

18 That's actually been a part of why we focused so  
19 heavily on things like SB 375 and AB 32 is comments from our  
20 local decision-making partners who have said those are  
21 they're precise concerns. There are specific lines in there  
22 that they're not sure how to respond to. And with a more  
23 integrated set of data, that allows them to compare these  
24 different technical outputs, they'll better be able to  
25 respond.

1                   COMMISSIONER DOUGLAS: And beyond the local  
2 governments, the county and the city, do you have the  
3 utilities engaged, LADWP and Edison?

4                   DR. BUNJE: Yeah, we have DWP directly engaged  
5 through LARC and Edison is very keen to join them. And  
6 we're actually negotiating with them exactly -- exactly what  
7 their best role is going to be.

8                   But Edison is directly a participant in the  
9 baseline's project, as well. And there's a member of the  
10 pack from Edison, for instance, as well, and so we're keen  
11 to ensure that that relationship is very, very robust.

12                  COMMISSIONER DOUGLAS: Good. That sounds great,  
13 that sounds like, you know, important analytic work that's  
14 plugging very directly into policy making and into -- at a  
15 variety of levels. So, that's exactly the sort of thing  
16 that we would like to see. So, thank you.

17                  DR. BUNJE: Great. Well, thank you all, I  
18 appreciate your interest, as well.

19                  CHAIRPERSON WEISENMILLER: Do you want to say  
20 anything?

21                  MR. MC COY: Mike McCoy, Director of the Urban  
22 Land Use and Transportation Center at UC Davis. It's a  
23 pleasure to be here today, Commissioners.

24                  We really appreciate the opportunity to advance  
25 the research that we're doing at UC Davis on land use and

1 transportation systems, and their relationship to inputs and  
2 outputs throughout the economy.

3           We've been looking at the production and  
4 consumption of goods and services throughout the State of  
5 California, modeling the \$17.5 trillion economy, or at least  
6 it was \$17.5 trillion in 2007.

7           The model that we've developed, the Production  
8 Exchange Consumption Allocation System, does not have as  
9 good an acronym as STREET, my congratulations to our  
10 colleagues at Irvine for that.

11           But we do look at the production of labor by 14  
12 household income classes, and their consumption of goods and  
13 services from 52 commodity categories. And we're very  
14 excited to take a highly focused look at Los Angeles County  
15 and how the population of Los Angeles County interacts with  
16 the consumption of goods services, the production of labor  
17 in an input/output system, where we will also be able to  
18 track the energy implications of that entire production and  
19 consumption system.

20           So, the role that UC Davis will play in this is  
21 directly in forecasting these commodity flows in the system.  
22 And what this particular project is going to allow us to do,  
23 with the help of Southern Cal Edison, and others, is to get  
24 a much more disaggregate picture of the actual energy flow  
25 in that system.

1           So, if you have any questions, I'd be happy to  
2 entertain them. Thank you very much.

3           CHAIRPERSON WEISENMILLER: Thank you.

4           COMMISSIONER BOYD: If there are no further  
5 questions, I'll move approval of the item.

6           COMMISSIONER BYRON: Second.

7           CHAIRPERSON WEISENMILLER: All in favor?

8           (Ayes.)

9           CHAIRPERSON WEISENMILLER: Thank you.

10          COMMISSIONER BOYD: Congratulations and thank you.

11          CHAIRPERSON WEISENMILLER: So, Item 9 is  
12 University of California at Davis. Possible approval of  
13 Contract 500-10-032 for \$124,000 with the Regents of the  
14 University of California, Davis, to assess the life-cycle  
15 water and water-related energy requirements of future  
16 California transportation fuels. This study will determine  
17 the potential water use impacts of future transportation  
18 fuel needs and identify strategies to reduce these impacts.

19          Joe?

20          MR. O'HAGAN: Thank you, Chairman Weisenmiller.  
21 Good morning, Commissioners. I apologize for my voice, but  
22 I have no control over this.

23          The proposed interagency agreement I'm bringing  
24 before you this morning is for 124,000 with the University  
25 of California, at Davis, Institute of Transportation

1 Studies.

2 The purpose of the proposal is to evaluate the  
3 life cycle, water and energy demands of future California  
4 transportation fuels.

5 This would include looking at the full life cycle  
6 from feedstock procurement, through refinement, through  
7 transportation to the vehicles.

8 And it would also take a look at both conventional  
9 and unconventional fossil fuels, bio fuels, electricity use  
10 for transportation and hydrogen.

11 Once the project identified the water and energy  
12 demands, both -- looking at both direct and indirect  
13 demands, and indirect would be the water associated, for  
14 example, with the diesel use for vehicles to collect the  
15 corn for ethanol production. That analysis will then --  
16 they'll try to develop a view of where these feedstocks will  
17 actually come from.

18 As you can appreciate, water demand, in  
19 particular, is very regional sensitive. As the example, in  
20 the decision memo it states, you know, corn -- corn ethanol  
21 in California, since the corn is irrigated it would require  
22 80 gallons per mile driven versus coming from Iowa, where  
23 it's only ten miles -- ten gallons per mile travel because  
24 the corn there is not irrigated.

25 What they would try to do is develop where these



1 sources come from and then look at how the water demand for  
2 these fuel sources would affect regional water demand.

3 Finally, the project would evaluate ways to  
4 produce that demand, whether through technology  
5 substitution, water conservation measures, for instance  
6 using reclaimed water, or better water management practices,  
7 such as improved irrigation approaches.

8 The project has a match funded of \$22,431. There  
9 will be a technical advisory committee. Staff is going to  
10 invite both PIER Transportation staff, as well as Fuels and  
11 Transportation staff, and the ARB staff to participate in  
12 this proposal.

13 And if you have any questions, I'd be happy to  
14 answer them.

15 COMMISSIONER BYRON: No questions, Mr. O'Hagan.  
16 But I would comment for my fellow Commissioners, this was  
17 vetted in the public interest -- I'm sorry, the RD&D  
18 division.

19 And it's the kind of study that probably is going  
20 to produce results that we're not going to like because,  
21 indeed, water usage is quite high with some of these fuels.  
22 But it's information we need in order to good planning going  
23 forward, and looking at these alternative fuels,  
24 particularly ethanol.

25 So, if there's -- Commissioner Boyd, I think has a

1 question.

2 COMMISSIONER BOYD: I don't have a question. Just  
3 a comment, I'm going to add on to what Commissioner Byron  
4 has indicated. Yes, we vetted this in the Research  
5 Committee.

6 But this discussion, Joe's discussion reminded me  
7 of the fact that this agency, in an IEPR several years ago,  
8 identified the water energy nexus and discussed it at  
9 length. Although, it was more of a electricity consumption  
10 component of water energy.

11 And we have been quoting the statistics for a few  
12 years, now, that roughly 20 percent of California's  
13 electricity consumption is involved in water, in one form or  
14 another.

15 But I was glad to see that the transportation  
16 aspect of water was not going to be addressed, and just  
17 another identification of the nexus between energy and  
18 water. And water is gold in California and it likely  
19 exceeds energy in its importance and it's criticality to the  
20 life blood of California.

21 So, I think this is going to be quite helpful. In  
22 fact, I wished we done it about a year ago, it might help us  
23 with a debate we're having with some folks in the  
24 Legislature right now about -- about ethanol, and corn, and  
25 so on, and so forth.

1           But, nonetheless, as we go farther and farther  
2 down the path to cradle-to-grave analyses, systems analysis,  
3 and what have you. We will need to know the attributes of  
4 this issue as we debate and invest in alternative fuels and  
5 try to give other decision makers input on -- on the effects  
6 of decisions that might be made relative to certain types of  
7 alternative fuels.

8           But this is a very reasonable investment, quite  
9 frankly, and they have some costs shares indicated to them.  
10 I'm very, very supportive of this proposal.

11           COMMISSIONER BYRON: Mr. Chairman, I move approval  
12 of Item 9.

13           COMMISSIONER BOYD: Second.

14           CHAIRPERSON WEISENMILLER: All in favor?

15           (Ayes.)

16           CHAIRPERSON WEISENMILLER: Thank you.

17           MR. O'HAGAN: Thank you very much.

18           COMMISSIONER BYRON: Thanks, Joe, take care of  
19 that voice.

20           CHAIRPERSON WEISENMILLER: And now we're looking  
21 at Item 10, which is University of California, Merced.  
22 Possible approval of Work Authorization MRA-02-089 for  
23 \$142,747 with the Regents of the University of California,  
24 Merced, to perform a comprehensive life cycle analysis study  
25 of algae biofuels.

1                   Okay, David.

2                   MR. EFFROSS: Mr. Chairman, Commissioners, before  
3 I proceed I need to mention that there was a printing error  
4 in one of the supporting documents. The number stated here  
5 on the agenda, 142,747 is correct. On the decision memo it  
6 was erroneously listed as 149,747. This error has been  
7 corrected.

8                   This is, essentially, a project to look at the  
9 life cycle analyses of algae fuels, which has two  
10 components. The first would be a meta analysis of existing  
11 life cycle analysis studies. These studies tend to be all  
12 over the board, there are -- they are based on very  
13 diverging assumptions.

14                   Last year there was a particularly controversial  
15 one put out by the University of Virginia, that particularly  
16 stirred up the algal fuel community because it was felt that  
17 their assumptions were so far off base.

18                   UC Merced will be looking at these previous  
19 analyses and, in addition, there's a component of this that  
20 will be taking place at UC Riverside's CE-CERT that will be  
21 looking at the life cycle analysis taking into account use  
22 for fuels of the residual biomass, which none of the  
23 previous life cycle analyses has taken into account.

24                   The residual biomass is that component of the  
25 algae that is left over after the lipids have been removed.

1 Do you have any questions for me?

2 COMMISSIONER BOYD: On your last point, I may be  
3 mistaken, but I thought that UCS had also done some work on  
4 this, the idea of the value and use of the biomass more than  
5 even the value and use of the oils that are derived.

6 Are you aware, are we aware of that?

7 MR. EFFROSS: There was work on the value and the  
8 use of the biomass, but there's not life cycle analysis work  
9 on that.

10 COMMISSIONER BOYD: No, I appreciate that, yeah.  
11 Okay, thank you.

12 MR. EFFROSS: You're welcome. I would also add  
13 that this would be the first contract that this agency would  
14 be taking out with UC Merced.

15 CHAIRPERSON WEISENMILLER: Actually, the agency  
16 has contracts with Professor Winston there, on solar, which  
17 I've visited UC Merced and Professor Winston to follow up on  
18 his contracts.

19 But, certainly, was very impressed there. The  
20 Chancellor had a beautiful metaphor about it's a growing  
21 campus and we're all now looking at the food -- you know, as  
22 if it were a fruit tree and we're all now looking at some of  
23 the fruit coming forward.

24 But, certainly, it's a very impressive effort that  
25 I would hope we could extend our relationship there.

1           COMMISSIONER BYRON: Yeah, Mr. Effross, your point  
2 is well taken, obviously, we're spreading the wealth here a  
3 little bit to some of the other UC campuses and doing  
4 research. And I was surprised when you said it was the  
5 first, as well. But I'm glad to see that Merced is  
6 developing this capability, competes with other UC campuses  
7 that I know are doing research in this area.

8           So, it's good, it's good for us to spread the  
9 funding dollars around the State's research facilities.

10          CHAIRPERSON WEISENMILLER: Right. I mean, Dean,  
11 certainly from Cal had helped -- my thesis advisor, had  
12 helped on getting Merced set up and had recruited our --  
13 from -- it was the chair of the physics department at the  
14 University of Chicago, in terms, also, to have very close  
15 connections to Commissioner Rosenfeld. So, both of them had  
16 certainly encouraged me to go to Merced to meet with them.  
17 And I would certainly encourage others to do that.

18          But a very strong transition from a very classic  
19 nuclear physics background into energy, now.

20          COMMISSIONER BYRON: Mr. Chairman, I move approval  
21 of this item.

22          COMMISSIONER BOYD: Second.

23          CHAIRPERSON WEISENMILLER: All in favor?

24          (Ayes.)

25          CHAIRPERSON WEISENMILLER: Thank you.

1 MR. EFFROSS: Thank you.

2 CHAIRPERSON WEISENMILLER: The next item is 11,  
3 University of California. Possible approval of Work  
4 Authorization MRA 02-090 for \$150,000 with the Regents of  
5 the University of California/California Institute for Energy  
6 and Environmental for research and development of a white  
7 paper on fuel-saving opportunities in light-duty vehicles.

8 Reynaldo?

9 MR. GONZALEZ: Good morning, Mr. Chairman and  
10 Commissioners. My name is Rey Gonzalez, I'm with the PIER  
11 Program's Transportation Subject area.

12 Staff is seeking approval of this MRA work  
13 authorization for \$150,000 to identify and evaluate under-  
14 measured and overlooked technologies that improve the fuel  
15 efficiency of light-duty vehicles.

16 The key objectives of this project is to perform  
17 research and analysis to better inform us on opportunities  
18 to meet California's transportation goals without  
19 duplication of federal research.

20 The research will focus on technologies, such as  
21 ancillary components and vehicle materials that may have  
22 affect on fuel efficiency.

23 The research will be headed by Dr. Alan Meier, of  
24 Lawrence Berkeley National Labs.

25 And I can answer any questions at this time.

1                   CHAIRPERSON WEISENMILLER: Any questions or  
2 comments? Do you have a motion? Go ahead.

3                   COMMISSIONER BOYD: I was just going to say we had  
4 an interesting discussion about this project, making sure  
5 that others hadn't researched this topic in the past, and  
6 learned that, indeed, and the staff had identified some  
7 things that were worthy of looking at. So, we supported the  
8 project and I'd recommend it's approval and make a motion to  
9 do so.

10                  COMMISSIONER BYRON: Agreed, Commissioner, I  
11 second.

12                  CHAIRPERSON WEISENMILLER: All in favor?  
13 (Ayes.)

14                  CHAIRPERSON WEISENMILLER: Thank you.

15                  MR. GONZALEZ: Thank you.

16                  CHAIRPERSON WEISENMILLER: Number 12, Stanford  
17 University. Possible approval of Agreement PIR-10-054 for  
18 half a million dollars with Stanford University to conduct  
19 field studies to determine the most effective strategies to  
20 elicit energy efficiency actions from consumers.

21                  David?

22                  COMMISSIONER DOUGLAS: So before this -- before we  
23 go further on this item, Chairman Weisenmiller and  
24 Commissioners, I am going to recuse myself from this item.  
25 And the reason is not exactly that I graduated from Stanford



1 Law School, but more precisely that I still have loans from  
2 Stanford Law School that I'm paying off. And Stanford Law  
3 School has a Public Interest Loan Repayment Program for  
4 graduates who go into public service or go into work with  
5 nonprofit organizations.

6 So, I am still getting the benefit of their loan  
7 repayment program and, as a result, that's a disclosable  
8 financial interest that will prohibit me from voting on this  
9 contract.

10 So what I will do at this point is step off the  
11 dais.

12 CHAIRPERSON WEISENMILLER: Thank you. Well, I  
13 guess we have one other Stanford grad.

14 COMMISSIONER BYRON: Yes, but I paid off my \$2,000  
15 student loan about 35 years ago, Commissioner.

16 CHAIRPERSON WEISENMILLER: I would notice we've  
17 broken up a string of UC contracts.

18 MR. WEIGHTMAN: Good morning, Commissioners and  
19 attendees. My name is David Weightman, I'm a contract  
20 manager with the PIER Buildings Program.

21 Stanford University is seeking \$500,000 from the  
22 CEC in match funds to support an initiative in which  
23 structured field studies will measure the effectiveness of  
24 various energy awareness and motivational strategies in  
25 reducing residential energy use.

1           These requested match funds represent  
2 approximately eight percent of the total project cost, so  
3 we're leveraging money on a 12-to-1 basis.

4           The Department of Energy, through the American  
5 Recovery and Reinvestment Act has supported this project  
6 with \$5 million in funds, and Stanford University is  
7 providing approximately \$791,000 to the project.

8           Researchers are going to set up an information  
9 platform in which they use sensors, software, web portals  
10 and databases to track energy use patterns and as a result  
11 of implementing different strategies.

12           Some of the strategies include providing real-time  
13 energy use information to households via in-home sensors and  
14 home area networks using applications from mobile devices  
15 and games. They use Smart Meter data. Games, community,  
16 and school programs, and novel financial incentives.

17           The research results will allow utilities,  
18 governments, and regional operators to estimate and to  
19 quantify the energy use reductions attributable to specific  
20 programs and increase the range of behavioral techniques  
21 that can motivate households towards greater energy  
22 efficiency.

23           There are 12 primary projects in this initiative  
24 and there are eight subprojects. And most of the investor  
25 utilities in California are participating in the project in

1 one way or another, and they're also private sector  
2 participation in this project, as well, so there's a lot of  
3 support for it.

4 This may be the largest behavioral energy-related  
5 study done to date. As I've reviewed the literature, it  
6 appears that it may be the largest done to date.

7 So, I'm hear to answer any questions you might  
8 have.

9 COMMISSIONER BYRON: Commissioners, a comment.  
10 Mr. Weightman, I believe this is one of many projects that  
11 we are co-funding. And I would just like to point out to my  
12 fellow Commissioners that this is an innovative approach  
13 that our RD&D Division came up with. I saw Mr. Gravely come  
14 into the office -- I'm sorry, come in and out of the meeting  
15 room just a moment ago. And Mr. Kelly, of course, was  
16 involved with this -- Dr. Kelly.

17 I forget the total, but it was maybe as much as  
18 \$21 million that we matched co-funding with regard to  
19 various American Reinvestment Recovery Act projects through  
20 the Department of Energy.

21 Very innovative approach. The Precourt Institute,  
22 I think as we all know, is doing some good work, I've heard  
23 very good feedback on this.

24 But talking with Dr. Sweeney, who runs that,  
25 they're not really very interested in contracting with the

1 State. It's apparently troublesome, or difficult, or  
2 something.

3 But he told me that this co-funding was very  
4 instrumental in them helping secure these funds from DOE in  
5 their ARRA bid. They're highly leveraged and, again, I  
6 applaud the RD&D Division for the approach they used here to  
7 leverage -- and I'm going to look for some help here. I  
8 mean, I'm sure one of the three of you, Mr. Gravely,  
9 Weightman, or Dr. Kelly can tell me, how must did we end up  
10 leveraging with our co-funding all together?

11 MR. WEIGHTMAN: I'll defer to Thom Kelly.

12 ASSISTANT EXECUTIVE DIRECTOR KELLY: It was  
13 approximately a billion dollars.

14 COMMISSIONER BYRON: Yeah. So, and it's hard to  
15 say that, of course, our meager 20 some million dollars  
16 caused all that to happen, but I know in this particular  
17 case that it was very instrumental in the Precourt Institute  
18 getting this -- I believe it's about a six and a half  
19 million dollar [sic] project altogether.

20 So, hats off, I'm obviously in favor of it and  
21 would suggest that we approve this match co-funding here  
22 today. I'll be glad to move it, but I'll wait to see if  
23 the -- okay, I'll move Item 12 for approval.

24 COMMISSIONER BOYD: Second.

25 CHAIRPERSON WEISENMILLER: All in favor?

1 (Ayes.)

2 MR. WEIGHTMAN: Thank you.

3 CHAIRPERSON WEISENMILLER: Okay, so Item Number  
4 13, this is PAX Scientific, Inc. Possible approval of  
5 Agreement PIR-10-020 for \$287,757 with PAX Scientific to  
6 develop energy efficient fans for server rooms. These fans  
7 have the potential of reducing data center server fan energy  
8 use by 15 percent.

9 Paul?

10 MR. ROGGENSACK: Good morning, Commissioners. My  
11 name is Paul Roggensack, with the PIER Industrial,  
12 Agricultural and Water team.

13 PAC Scientific is an engineering, research and  
14 development firm located in San Rafael that specializes in  
15 funding innovative streamlined solutions for fluid-related  
16 industrial problems.

17 This project, high energy -- high efficiency  
18 server fans is a grant for \$299,265 for a term of 30 months.  
19 The match funding on this is \$100,038.

20 This project was selected through a competitive  
21 solicitation.

22 It will address the high energy required for  
23 cooling data centers. Cooling data centers can be as much  
24 as 40 percent of the total energy required in a data center.

25 Previous energy efficiency projects in the PIER

1 Program for data centers focused on facility improvements,  
2 such as HVAC and airflow management.

3           However, this project will focus on improving the  
4 cooling of hot spots within the server, itself, such as the  
5 central processing unit.

6           Data center servers have as many as eight cooling  
7 fans, each consuming at least 15 watts per fan. The total  
8 energy required for cooling fans is about ten percent of the  
9 cooling energy required in a data center.

10           The project goal is to reduce the energy required  
11 for each server fan by at least 15 percent.

12           The energy improvements will be achieved by the  
13 PAX streamlining principle, a technology based on fluid  
14 movement in biological systems.

15           The PAX streamlining principle incorporates a new  
16 blade design on fans that have been successfully applied in  
17 other fan applications, such as residential refrigeration  
18 and HVAC condenser fans, in which power usage dropped by 20  
19 to 30 percent, with significant noise reduction.

20           PAX estimate that this project will reduce energy  
21 or power use in California by 2.7 megawatts.

22           And I'd also like to correct the record on this  
23 project. In the decision, in the RD&D Committee meeting, it  
24 was mentioned that Hewlett Packard will be a partner on this  
25 project. However, that has changed, the new partner will be

1 Jabil Circuits. I'd be happy to answer any questions.

2 CHAIRPERSON WEISENMILLER: Any questions or  
3 comments?

4 COMMISSIONER BYRON: A quick comment. I mean,  
5 it's just astounding to me that there's this kind of savings  
6 available when, you know, we all thought, I think,  
7 propellers, and impellers, and blades, you know, all the  
8 research had been done on this decades ago. And so it's  
9 astounding to me to find that there's still efficiency gains  
10 to be had there.

11 Would you care to comment on why you picked a new  
12 partner in this project?

13 MR. ROGGENSACK: Jabil was just a better fit for  
14 this type of project. Hewlett Packard, for their own  
15 reasons, decided not to participate.

16 COMMISSIONER BYRON: Okay. Commissioners, I  
17 believe this was vetted, recently, through the Public  
18 Interest -- I'm sorry, it says PIER funding all the time and  
19 I apologize, through the RD&D Committee.

20 And I'd recommend it to you for approval, I'd move  
21 Item 13.

22 COMMISSIONER BOYD: Second. Excuse me. I'll just  
23 second that and just say that the potential savings are  
24 significant and this is very impressive, if this works out.  
25 So, I'm extremely supportive of this piece of work.

1           CHAIRPERSON WEISENMILLER: All in favor?

2           (Ayes.)

3           CHAIRPERSON WEISENMILLER: Thank you. Thanks.

4           Item 14 is SeaMicro Incorporated. Possible

5 approval of Agreement PIR-10-057 for a grant of \$250,000 to

6 SeaMicro Incorporated to develop a prototype compute

7 appliance that will replace volume serves in data centers

8 and may reduce energy use by 75 percent. This award will be

9 cost-share for the recipient's American Recovery and

10 Reinvestment Act of 2009 award.

11           Paul?

12           MR. ROGGENSACK: Thank you, Commissioners.

13 SeaMicro is a start-up company in Santa Clara, doing

14 pioneering work on server technology for data centers. The

15 project is called the Volume Server Power Reduction Research

16 and Development, for which we are requesting approval for a

17 \$250,000 grant, for a term of 24 months.

18           This grant will be matching a \$9.3 million

19 American Recovery and Reinvestment Act grant, and was also

20 competitively solicited.

21           SeaMicro has also obtained venture capital for

22 match funding from Coastal Ventures, Juniper Networks,

23 Crosslink Capital, and Draper, Fisher, Jurvetson, totaling

24 10.7 million.

25           The project is to develop a compute appliance to



1 replace volume servers, which are the low end and most  
2 common servers in data centers, using about 68 percent of  
3 the data center energy.

4           The energy efficiency problem that the compute  
5 appliance will address is that the CPU of a volume server is  
6 inefficiently matched with the workload of today's data  
7 centers.

8           As technology has advanced, the CPU became more  
9 powerful, requiring more energy and is inefficient for the  
10 simple tasks of a data center.

11           This is the most common work on the internet,  
12 which is called the -- which includes web searchers, viewing  
13 webpages, e-mail, and news that are simple tasks that do not  
14 require the computational power in today's volume server  
15 CPU. But these tasks consist of 80 percent of the workload  
16 of data center industry.

17           The compute appliance will replace the CPU with  
18 smaller, simpler, and less energy-intensive processors  
19 commonly found in small laptop computers and hand-held  
20 devices.

21           These processes are linked into an array that  
22 reduces the size and energy requirements of the volume  
23 server by 75 percent.

24           The estimated energy savings in California would  
25 be 3.7 billion kilowatt hours per year.

1           The compute appliance has been already constructed  
2 and is in beta testing with customers. The PIER funds will  
3 be used for software improvements, engineering, and quality  
4 assurance, and market and product development.

5           I'd be happy to answer any questions on this.

6           COMMISSIONER BOYD: I don't have a question, but  
7 maybe it's just a comment. Taking these two, the last  
8 project and this together is as part of the effort -- I  
9 believe this agency, more than two years ago, identified the  
10 computer centers and what have you as being ripe for work  
11 that might result in significant energy savings. And these  
12 two projects, this one, just like the last one are, I  
13 believe, the result of staff's pursuing that idea.

14           And again, just like the last project, this one  
15 offers, if it is realized, very significant energy savings,  
16 thus cost savings to lots of people. And, again, for a very  
17 small investment would have a significant return.

18           So, I for one was encouraged, when I saw the  
19 agenda book, to see that our discussions of this type of  
20 area are now beginning to be realized in research projects  
21 that may pay off for this Commission in the future, well  
22 beyond not only Commissioner Byron's term, but even my own  
23 most likely.

24           But nonetheless, it's the right kind of work that  
25 this kind of a research program should be carrying out for

1 the ratepayers of California.

2 COMMISSIONER BYRON: Mr. Roggensack, quick  
3 question. It looked as though this has got a pretty  
4 complicated financing structure associated with it, with the  
5 involvement of the \$9.3 million grant from DOE, the funding  
6 from four different venture capital organizations. How long  
7 was this project in development before it's reaching us  
8 here, today.

9 MR. ROGGENSACK: Well, the grant was in 2009 and  
10 it's -- I don't have the exact dates, but it's been ongoing  
11 for at least a year.

12 And we are -- it's true, we are kind of getting in  
13 late to the project. Like I said, they've already built the  
14 device and it's in beta testing, so we're just going to be  
15 helping with quality assurance, and software development,  
16 and whatnot.

17 COMMISSIONER BYRON: And the demonstration of it?

18 MR. ROGGENSACK: That's right, yeah.

19 COMMISSIONER BYRON: Okay. Well, Commissioners,  
20 another good example of our leveraged co-funding. I'd  
21 recommend approval, so I move the item.

22 COMMISSIONER BOYD: Second.

23 CHAIRPERSON WEISENMILLER: All in favor?

24 (Ayes.)

25 CHAIRPERSON WEISENMILLER: Thank you.

1 MR. ROGGENSACK: Thanks.

2 CHAIRPERSON WEISENMILLER: Okay. So, Item 15,  
3 Electric Power Group, LLC. Possible agreement of PIR-10\_068  
4 for ARRA cost-share grant of \$999,743 to Electric Power  
5 Group, LLC for phasor development, analysis and research for  
6 implementing various aspects of phasor technology at the CAL  
7 ISO network.

8 Avtar?

9 MR. BINING: Thank you. Good morning, my name is  
10 Avtar Bining. I manage the Energy Storage Program and the  
11 American Recovery and Reinvestment Act projects on Smart  
12 Grid and Energy Storage at the Energy Commission.

13 This agreement that I'm going to present for your  
14 approval is first of the 17 ARRA projects that I will be  
15 bringing before you over next couple of months for your  
16 approval.

17 This agreement is with the Electric Power Group,  
18 LLC, in Pasadena, California to integrate and demonstrate  
19 synchrophasor technology at the California Independent  
20 System Operator network. Integrated synchrophasor  
21 technology will provide real-time information about the  
22 performance of electrical transmission systems.

23 This project is an essential part of the \$54  
24 million ARRA award that the Western Electricity Coordinating  
25 Council, in short WECC, along with the ElectricPower Group

1 as a key partner, received from the U.S. Department of  
2 Energy for the Western Interconnection Synchrophasor  
3 Program.

4 This program will help improve the reliability of  
5 the bulk transmission power grid spanning 14 western states  
6 by extending and deploying synchrophasor technologies in  
7 their electrical systems.

8 CAL ISO's efforts must seamlessly integrate with  
9 WECC's synchrophasor projects in order to reap benefits for  
10 California and the interconnected Western Grid. These  
11 benefits include improved grid reliability, efficient  
12 operation and utilization of the grid, and stability  
13 monitoring in real time. The term of this agreement is  
14 about 33 months.

15 I request your approval of this item and I will be  
16 answer your questions that you may have.

17 CHAIRPERSON WEISENMILLER: Any comments or  
18 questions?

19 COMMISSIONER BYRON: Only a comment, again. And,  
20 of course, I'm very familiar with this work. As you  
21 indicated, this is a latest in a series of research projects  
22 that this Commission has funded or co-funded with regard to  
23 phasor technology.

24 Having chaired or had the privilege of chairing  
25 the Transmission Research Advisory Committee, comprised of

1 utilities and other members of the West, and DOE, that are  
2 involved in transmission, shall we say, measurement, this is  
3 a very key project. It's one of the successes of that work.  
4 And I know that this past year I have tried to interest  
5 Commissioner Weisenmiller in this area, as well.

6 Commissioner, I know you now have additional  
7 responsibilities as Chair, however, I hope that you will  
8 consider continuing to be involved in this activity so that  
9 we can maintain a high level of utility involvement in this  
10 research.

11 We know this is one of the areas that they've  
12 always been very interested in when it comes to public  
13 interest research funding.

14 So, I would certainly recommend this one for  
15 approval, as well, from my Commission, be glad to move.

16 CHAIRPERSON WEISENMILLER: I was going to say, I  
17 did have the opportunity, as sort of my dialogue with the  
18 Senate Rules Committee staff, to discuss this project and  
19 the technology.

20 COMMISSIONER BYRON: Uh-hum.

21 CHAIRPERSON WEISENMILLER: And again, I think one  
22 of our first joint meetings was with Joe Eto to brief us on  
23 this and other PIER stuff. So, this is very important,  
24 you're right. I mean, certainly, the utilities are very  
25 interested in it, as is the CAL ISO. And so it's one of

1 our -- one of the real success stories at PIER that I think  
2 can certainly capture a lot of interest in the Legislature.  
3 So, I certainly intend on keeping pushing this forward.

4 COMMISSIONER BYRON: Good.

5 CHAIRPERSON WEISENMILLER: And looking for the --  
6 the analogous technologies more on the distribution system.  
7 As we put more and more DG into the distribution system,  
8 we're going to need something like this to really monitor  
9 what's going on. So, it's very important to be thinking  
10 about that next step.

11 COMMISSIONER BYRON: And everybody indicates this  
12 has had a substantial impact on the reliability of the grid  
13 in California and the west. It's one of those things that's  
14 difficult to quantify in terms of its benefits to the State.

15 CHAIRPERSON WEISENMILLER: Well, again, I think  
16 the metaphor of this is the MRI system for the grid is one  
17 way of thinking about what this does in terms of adding  
18 capacity. We're going to need to maintain reliability as  
19 we're addressing renewable integration.

20 COMMISSIONER BYRON: Uh-hum.

21 CHAIRPERSON WEISENMILLER: So that may be one of t  
22 hose just-in-time technologies that we have to roll out  
23 right now, as fast as we can.

24 COMMISSIONER BYRON: So, Mr. Chairman, I move  
25 approval of Item 15.

1                   COMMISSIONER BOYD: I'll second the item and just  
2 comment that as I read through this item I thought of our  
3 working relationship with WECC, and I thought of all the  
4 work that you, Commissioner Byron, have done on transmission  
5 and I have relied on you, heavily, to represent us and to  
6 keep me up to speed on what's going on here. I'm going to  
7 miss you on this subject.

8                   And it further reminds me of recently I attended  
9 my first meeting of an advisory committee to Sandia Labs on  
10 their investment in microgrid work and they wanted input.  
11 And I tried to shuck it off on you, but they actually wanted  
12 me to do it, so I've done it. And I'm trying to pass on  
13 what we are learning here to these folks, who are trying to  
14 undertake some additional work.

15                  But this has, this whole area has been extremely  
16 interesting and revealing the last couple of years. And,  
17 again, this is going to prove to be very important as we  
18 sort out generation versus transmission, versus  
19 distribution, then incorporate DG and energy storage, and  
20 what have you into a very complex system we are creating for  
21 ourselves.

22                  And I think you will all benefit greatly from this  
23 work in future years here, at the Commission.

24                  So, if yours was the motion, mine is a second.

25                  COMMISSIONER BYRON: Good.



1                   CHAIRPERSON WEISENMILLER:   Okay.   We have a motion  
2   and a second, all in favor?

3                   (Ayes.)

4                   CHAIRPERSON WEISENMILLER:   Thanks.

5                   MR. BINING:   Okay.

6                   CHAIRPERSON WEISENMILLER:   Now, we're up to Item  
7   16, which is the first of three similar contracts.   Southern  
8   California Edison, possible approval of Amendment 2 to  
9   Contract 400-07-007 with Southern California Edison adding  
10   \$599,403 in a two-year time extension to continue daily  
11   application processing and call center activities for the  
12   New Solar Homes Partnership within its territory.

13                  Diane -- Diana.

14                  MS. CHONG:   Good morning, Commissioners, my name  
15   is Diana and I work in the Renewable Energy Office.

16                  Some background, the New Solar Homes Partnership  
17   was launched in January 2007 as part of the California Solar  
18   Initiative.   The New Solar Homes Partnership is dedicated to  
19   incentivizing the installation of solar energy systems on  
20   new residential construction in investor-owned electric  
21   service territories.

22                  In late 2007, the Commission approved the  
23   outsourcing of the daily program administration of the New  
24   Solar Homes Partnership to the three investor-owned  
25   utilities, Pacific Gas and Electric, Southern California

1 Edison, and San Diego Gas and Electric.

2 And since spring of 2008 the utilities have been  
3 administering the program. Their responsibilities include  
4 reviewing and approving applications and payment claims,  
5 facilitating applicants' participation in the utilities' New  
6 Construction Energy Efficiency Programs, managing a solar  
7 call center and providing workshops to stakeholders on the  
8 program.

9 To facilitate continued administration of the  
10 program, we are bringing before you three contract  
11 amendments. We propose a two-year time extension until June  
12 30<sup>th</sup>, 2013 for all three contracts and a continued annual  
13 allocation of \$999,999 per year for \$1,999,998 for the two  
14 years to be divided up between the three contracts.

15 To determine the proposed allocation that we are  
16 bringing before you today, we implemented a fixed cost  
17 component, which we consider to be the minimal resources  
18 required to administer the program at each electric utility  
19 service territory, and a variable cost component that's tied  
20 directly to application volume.

21 And these two components were used to determine  
22 the proposed allocations.

23 So, in conclusion, we are seeking approval for the  
24 three items below. Thank you.

25 COMMISSIONER DOUGLAS: I have a question on this

1 one.

2 CHAIRPERSON WEISENMILLER: Yes, I was going to say  
3 any questions, comments? Go ahead, Commissioner.

4 COMMISSIONER DOUGLAS: Thank you. So, the  
5 transfer to utility administration, and this question really  
6 goes for all three of the items on this topic. The transfer  
7 to utility administration occurred in my first year on the  
8 Commission, when I was on the Renewables Committee, and at  
9 the time volumes were much, much higher and we saw some real  
10 efficiencies in having the utilities administer the program.

11 My understanding is that volumes in that program  
12 are very low right now and I'm struggling to get my mind  
13 around not so much the time extension, but the \$2 million  
14 cost on call centers when, you know, my understanding is the  
15 new home building really hasn't picked up and volumes in the  
16 program really haven't increased.

17 And so, I'm just trying to understand, in a time  
18 in which we're really looking into efficiencies, whether  
19 this still makes sense in this way?

20 MS. CHONG: So, the proposed allocations are  
21 determined by fixed costs, which is the minimal resources we  
22 think is needed to open the shop at each utility service  
23 territory, and there's also a variable cost according to  
24 volume.

25 So, if not all of -- if there's not going to be a

1 lot of volume, then we don't expect that a lot of the money  
2 will be used.

3 COMMISSIONER DOUGLAS: I see. Can you give me an  
4 understanding of the break out between fixed cost and  
5 volume? Because what I understand you saying is it wouldn't  
6 be the full million -- two million dollars spent if volumes  
7 continue at their -- at the pace, say, of this past year?

8 MS. CHONG: Well, we expect that, hopefully,  
9 within the next year or two will pick up, so maybe that the  
10 dollar amounts that we have allocated will be actually used.

11 And the fixed cost is basically for a manager, a  
12 supervisor, and a couple of analysts for each utility  
13 service territory, so that they can open to have the program  
14 in their area.

15 COMMISSIONER DOUGLAS: Okay, that answers my  
16 question. I know this went through the Renewables  
17 Committee, but my institutional memory on this item prompted  
18 me to ask, and maybe I'll ask the question this way, I mean,  
19 has it proven to be an efficiency in terms of, you know, a  
20 combination of staff time and resources versus having  
21 utilities administer the program?

22 MS. CHONG: We found that when the program  
23 administrators administrate the program there are lots of  
24 costs that the applicants no longer have to endure because  
25 there are efficiencies within the utilities. We don't ask

1 for as much paperwork anymore because the utilities can  
2 internally review a lot of the information, so that the  
3 customers do not have to provide the paperwork.

4 COMMISSIONER DOUGLAS: All right, thank you.

5 COMMISSIONER BOYD: Boy, your institutional memory  
6 on this subject is very helpful and very good, because when  
7 we dealt with this in the Renewables Committee this is a  
8 background that is helpful in us feeling better about the  
9 recommendation we made. Thank you.

10 CHAIRPERSON WEISENMILLER: I think we had asked a  
11 similar question, although it is interesting, Commission-  
12 wide as we struggle with some of the cost center questions.  
13 I think part of the drive there was prior to this, you know,  
14 we basically had student interns answering lots of  
15 questions, with experience perhaps similar to what we've had  
16 in the appliance rebate area so --

17 COMMISSIONER DOUGLAS: Well, certainly, my take  
18 away from our experience in the appliance rebate area is  
19 that it would have been far better to have done it in-house,  
20 given what we ultimately encountered.

21 And so -- and I don't mean in-house, with student  
22 interns. But, you know, I do think that we should look at  
23 this question going forward and we should consider whether  
24 the volume of various call center contracts means that it  
25 makes sense that we run something like this in-house.

1 MS. CHONG: May I add a comment? The utilities  
2 aren't just administering the call center, they're not only  
3 answering questions, but they hand hold the applicants  
4 throughout the process, which engages a lot of different  
5 parties, including HRS raters, energy consultants, and  
6 other -- their applicants, and other retailers, too.

7 COMMISSIONER BYRON: Commissioner Douglas, I'm  
8 really glad to hear you ask some of these questions. I had  
9 similar questions in my mind, as well, having not been  
10 involved in the committee activities associated with the  
11 vetting of this project.

12 And so I'm glad to see you ask them. Usually,  
13 this is the purview of the Public Utilities Commission,  
14 having the IOUs, the investor-owned utilities, administer  
15 the various programs that they do.

16 I note that most of those programs have more zeros  
17 after the dollar amounts than these.

18 And although I'm not particularly a fan of IOU  
19 administration of consumer programs that I think often  
20 conflict with what their business model is, it does seem as  
21 though they are set up to do this, and this is, you know, an  
22 economy of scale issue here.

23 I don't know the specifics around any metrics  
24 associated with the cost per transaction, or anything, but I  
25 can certainly understand why we set this up, originally, and

1     why we're proceeding down this path.

2                 Did you say this is a two-year extension?

3                 MS. CHONG:   Yes.

4                 COMMISSIONER BYRON:   Okay.   Would it likely come

5     back before this Commission for a re-extension at that time?

6                 MS. CHONG:   Yes.

7                 COMMISSIONER BYRON:   Okay.   Is there a sunset to

8     this?

9                 MS. CHONG:   When the program will be ended, which

10    is 2016 or later.   Because even when -- after 2016, we still

11    have to administer the program for approved applications for

12    at least three years, depending on if -- if they're

13    developments, we have currently a three-year reservation for

14    large developments.

15                 COMMISSIONER BYRON:   Good.   You're well prepared,

16    you have all the answers.   I'm glad to see there's about a

17    two-year review on this, I think that's about appropriate,

18    Commissioners.

19                 I will move approval of Item 16 and, hopefully,

20    quickly, Items 17 and 18.

21                 CHAIRPERSON WEISENMILLER:   Okay.   And do I have a

22    second?

23                 COMMISSIONER DOUGLAS:   I'll second the item.   And

24    if you don't mind, Chairman, I'll second with just one more

25    question.

1           If the volume were to be zero in the next two  
2 years, which it won't be, but if the volume were to be zero  
3 can you tell me what the fixed cost is versus the variable  
4 cost?

5           MS. CHONG: So, the fixed cost would be just to  
6 have the personnel there to administer the payment claims  
7 that would be coming.

8           COMMISSIONER DOUGLAS: And so, of about \$2 million  
9 between three utilities, can you give me a sense of how much  
10 of that is fixed versus variable?

11          MS. CHONG: Currently, the fixed cost is half.

12          COMMISSIONER DOUGLAS: Half, all right. Thank  
13 you. And so I'd second the item. Half, all right. Thank  
14 you. And so I'd second the item.

15          CHAIRPERSON WEISENMILLER: All in favor?

16          (Ayes.)

17          CHAIRPERSON WEISENMILLER: Thank you.

18          MS. CHONG: Thank you.

19          CHAIRPERSON WEISENMILLER: Let's go onto Item 17,  
20 which is a very similar contract. San Diego Gas and  
21 Electric, possible approval of Amendment 2 to contract 400-  
22 07-006 with Sand Diego Gas and Electric adding \$513,504 and  
23 a two-year time extension to continue daily application  
24 processing and call center activities for the New Solar  
25 Homes Partnership within its territory.



1           Is there anything else you'd like to add on this  
2 particular one?

3           MS. CHONG: No.

4           CHAIRPERSON WEISENMILLER: Are there any comments  
5 or questions from the committee on this item?

6           COMMISSIONER DOUGLAS: I think that I've run  
7 through all of my questions for the three items, Chairman,  
8 so I will refrain from asking any additional questions.

9           CHAIRPERSON WEISENMILLER: Okay.

10          COMMISSIONER DOUGLAS: I'll move approval.

11          COMMISSIONER BYRON: I think they were good  
12 questions, Commissioner. I'll second it.

13          CHAIRPERSON WEISENMILLER: All in favor?

14          (Ayes.)

15          CHAIRPERSON WEISENMILLER: Okay. So, now we're on  
16 to Item 18, Pacific Gas and Electric Company, possible  
17 approval of Amendment 2 to contract 400-07-005 with Pacific  
18 Gas and Electric Company, PG&E, adding \$887,091 in a two-  
19 year time extension to continue daily application processing  
20 and call center activities for the New Solar Home  
21 Partnership within its territory.

22           Is there anything you want to add on this last  
23 contract?

24          MS. CHONG: No, sir.

25          CHAIRPERSON WEISENMILLER: Okay. Are there any

1 Commission comments or questions?

2 Do I have a motion?

3 COMMISSIONER BYRON: Mr. Chairman, I move approval  
4 of Item 18.

5 COMMISSIONER BOYD: Second.

6 CHAIRPERSON WEISENMILLER: All in favor?

7 (Ayes.)

8 MS. CHONG: Thank you.

9 COMMISSIONER BYRON: Thank you.

10 CHAIRPERSON WEISENMILLER: Thank you.

11 COMMISSIONER BOYD: Thank you.

12 CHAIRPERSON WEISENMILLER: So, now on to Item 20,  
13 which is the minutes. Possible approval of February 2<sup>nd</sup>  
14 Business Meeting Minutes.

15 COMMISSIONER BOYD: Move approval.

16 COMMISSIONER DOUGLAS: Second.

17 CHAIRPERSON WEISENMILLER: All in favor?

18 (Ayes.)

19 CHAIRPERSON WEISENMILLER: Item 21, Commission  
20 Committee presentations and discussions.

21 COMMISSIONER DOUGLAS: Chairman Weisenmiller  
22 reminded me, although it wasn't that long ago, that between  
23 this Business Meeting and the last one the IEPR Committee  
24 held a workshop in -- actually, at the South Coast Air  
25 Quality Management District's building in Diamond Bar, in

1 the Los Angeles area.

2 And the topic of the workshop was the AB 1318  
3 analysis called for in legislation. And that analysis  
4 takes, as a given, that given areas use -- and shortage of  
5 ERCs in the South Coast Basin it asks, you know, how much  
6 new fossil generation is needed in that area if we take our  
7 DG, our efficiency, and our renewable goals and meet those  
8 goals?

9 And so it's a very important analysis. It was a  
10 very well-attended workshop. It's being done jointly, with  
11 ARB in the lead, and the Energy Commission, the California  
12 ISO and the PUC working very closely on the report. And it  
13 was very well-attended from a diverse set of stakeholders,  
14 from environmental groups, EJ groups, community, and also,  
15 certainly, the energy stakeholders that you would expect,  
16 the utilities, the -- some generator representatives, and  
17 more.

18 So, I think it's a very important analysis. It's  
19 also a rather challenging one and so we'll move forward with  
20 it as quickly as we can.

21 COMMISSIONER BOYD: I might comment, you did -- a  
22 different subject or the same.

23 Okay. Well, one quick comment. I just wanted to  
24 note that you did say that the charge was what's needed.  
25 Therefore, getting -- flirting with the "need" word, which I

1 find very interesting in repeatedly coming up in the last  
2 two or three years as to -- as to how we plan our  
3 electricity future in the State is the "need" question,  
4 which will not be resolved for quite some time, I trust.

5 COMMISSIONER DOUGLAS: Well, it is interesting.  
6 And as we parse, meaning we've heard the word, and I've  
7 heard the word "need" used in many, many different ways.  
8 But I have no doubt from sitting in that workshop, and  
9 listening to the community, and also listening to South  
10 Coast AQMD, listening to Barry Wallerstein and listening to  
11 other stakeholders articulate the purpose of the study, that  
12 they want to know how many fossil power plants their area  
13 needs in order to keep the lights on, and in order to  
14 integrate renewables, and in order to meet other energy  
15 goals.

16 And so, you know, if you can do it with three,  
17 they don't want ten. And that's an important drive, coming  
18 within that community, that I think certainly merits  
19 analysis. And it's very different kind of analysis than the  
20 one that the Energy Commission used to do on every fossil  
21 power plant, although, the word is the same.

22 COMMISSIONER BOYD: Yeah, my recollection is their  
23 current perception is that the long-term procurement program  
24 takes care of that question, but I note the question comes  
25 up repeatedly.

1           And my concern is a long-term procurement program  
2 doesn't take into account the other approaches, the  
3 alternative approaches that we get hammered about in siting  
4 cases by -- by interveners, and what have you, and the other  
5 things being, you know, transmission, distribution, energy  
6 storage, distributed generation, et cetera.

7           So, I'm sure in carrying out the Governor's energy  
8 plan we're going to have some interesting discussions of how  
9 to accomplish that, and to meet his desires and goals in  
10 some -- some form or some setting that does look at the  
11 entire system and debate all the components thereof. So,  
12 interesting.

13           COMMISSIONER DOUGLAS: Thank you. And I will  
14 also, briefly mention that the Renewable Energy Policy  
15 Group, which is a group of executive level members from  
16 state and federal agencies, including the Department of  
17 Interior and Bureau of Land Management, met recently. And  
18 my sense of time is so blurred that I don't actually -- I  
19 can't even pin down recently, but it was in the last week or  
20 so.

21           And it's a continuation of the partnership that we  
22 developed in analyzing and reviewing the ARRA projects that  
23 were before the Energy Commission last year. It's now  
24 moving into how we work together on the Desert Renewable  
25 Energy Conservation Plan, how we assist in the analysis and

1 work together on the analysis of the 2011 projects. They're  
2 mostly photovoltaic but, of course, most of the agencies  
3 meeting in that room have some direct role on the  
4 photovoltaic projects, as well.

5 So, it's a very important partnership and it's one  
6 that we expect to see continue with great momentum going  
7 forward.

8 CHAIRPERSON WEISENMILLER: Yeah, just to quickly  
9 follow up on both of those. The interesting thing on the  
10 South Coast is that Wallerstein sat through almost the whole  
11 day and his questions to us were very much how many and  
12 where, you know.

13 And so, while we had a lot of push back in our  
14 earlier workshop on the infrastructure need assessment, as  
15 Commissioner Douglas indicated, there was a very, very  
16 strong call on the air regulators and the community groups  
17 for just that type of assessment of how much and where.

18 And I think one of the interesting things at the  
19 REPG meeting was that the federal government is issuing its  
20 guidance on Golden Eagle, and sort of wind machine --  
21 essentially, they're starting to deal with some of the avian  
22 issues that we've dealt with before, they have draft  
23 guidelines out.

24 There's some ones that we need to understanding  
25 better is how -- how they fit with what we've done. You

1 know, I think we've both heard from the wind industry that  
2 the standards we have are -- we, meaning either us or the  
3 feds, are outrageous compared to the other ones, so we're  
4 trying to triangulate on exactly how these things line up.

5 COMMISSIONER BYRON: Mr. Chairman, I was going to  
6 ask, just before we move off of this subject, Dr. Kelly, is  
7 this -- do we have something in common, is this your last  
8 Business Meeting?

9 ASSISTANT EXECUTIVE DIRECTOR KELLY: Yes, it is.

10 COMMISSIONER BYRON: Well, sir, you have 36 years  
11 of service before this Commission. I think -- I think it  
12 merits a little note here that we appreciate very much what  
13 you've done.

14 You've had just about -- you've held just about  
15 every job in this Commission I believe there is, two or  
16 three of them during my short tenure. So, I'd like to  
17 congratulate you on your 36 years of service.

18 ASSISTANT EXECUTIVE DIRECTOR KELLY: Thank you.

19 CHAIRPERSON WEISENMILLER: Well, certainly,  
20 Commissioner, I think all of us want to go on the record  
21 thanking you for your public service to this Commission and  
22 your dedication over the last four years to, basically, help  
23 us deal with California's energy challenges.

24 You had some very intensive siting cases last year  
25 that I think certainly involved you and Commissioner Eggert

1 much more than, say, you and your spouse in terms of time  
2 together at that period.

3 So, again, we would like to thank you for your  
4 public service.

5 COMMISSIONER BYRON: Thank you. They've all  
6 become photovoltaic cases, now, haven't they?

7 CHAIRPERSON WEISENMILLER: Maybe they can follow  
8 you to your next ventures.

9 COMMISSIONER BYRON: Mr. Chairman, I'd like to  
10 just make one remark and that is it's been a privilege to  
11 work on this Commission with some astounding Commissioners.  
12 I've just been amazed. Amazed, also, to think that  
13 Governors can get it right so often with their choices.

14 And this group of Commissioners is no exception,  
15 you all bring a diverse set of experiences, and skills, and  
16 expertise and an enormous sense of responsibility and  
17 dedication to the citizens of California.

18 I wish you the best of luck. Just based upon the  
19 comments that we heard in the last few minutes, you have  
20 your hands full here for the next few years.

21 COMMISSIONER BOYD: Well, let me join Commission  
22 Byron and the rest of you saluting Dr. Kelly. We just call  
23 him Thom because he's been here so -- so long.

24 But I have to salute anybody who's put so much  
25 public service in and so dedicated, therefore, to serving



1 the people of California. It's a tough road to hoe,  
2 sometimes. There are minor abuses along the way, but the  
3 pride in doing the job seems to prevail with lots of folks,  
4 and I've certainly noticed here.

5 And, Thom, you've retired multiple times, it seems  
6 like, but we keep pulling you back. But you have said this  
7 is it. You try multiple sports.

8 In any event, let me just say, as a fellow fairly  
9 lengthy public servant that I appreciate what you've done, I  
10 appreciate your dedication to this agency. That is a long  
11 time in a single agency, it beats anything that -- I don't  
12 even come close to that and I thought, you know, I was with  
13 Methuselah in terms of being around for a while.

14 In any event, good luck to you in the future,  
15 enjoy your new flexibility and mobility I hope you're  
16 gaining from the various surgical implants that you've been  
17 provided of late. And we wish you well, certainly.

18 And, Commissioner Byron, now, while we will be  
19 feeding you in a short period of time here, just sitting  
20 here at the dais and in the official record of this agency,  
21 I just want to say it's been an incredible pleasure for me  
22 to have you here, a gentleman who made the transition from  
23 the private to the public sector without -- without a ripple  
24 on the pond, who rapidly appreciated the work of public  
25 sector people. And who, with enviable humor and good

1 manners has conducted -- you've conducted yourself  
2 throughout these years far better than I could possibly have  
3 hoped to and have given good advice and counsel on that  
4 point, on multiple occasions.

5           And you are certainly known for that, as evidenced  
6 last night, but you're also known for your incredible  
7 support for the employees of this organization and I'm sure  
8 we'll hear more about that in a short time.

9           But thank you and good luck to you. And don't  
10 forget us, please come and visit us on occasion. I doubt  
11 somebody, who drives around in a car with a license plate  
12 that says "Energy CZAR" is going to stray too far from the  
13 energy field. So, we expect that it would lead you back  
14 here on occasion, and you're certainly -- the doors are open  
15 here. You've totally charmed the security staff, you  
16 probably won't even need a badge to get in the building.

17           Anyway, good luck, Jeff.

18           COMMISSIONER DOUGLAS: Commissioners, just  
19 briefly, because a lot has been said, I want to join with my  
20 colleagues in thanking Thom for his years of service and  
21 dedication to this agency, and for the hard work he's put  
22 in, in the time that I've known you, and I know the years  
23 before that I've had the opportunity to know you.

24           And to Commissioner Byron for the very warm  
25 welcome he gave me when I joined the Commission, and the

1 hard work, and the collegiality and the great respect that I  
2 have for him.

3 So I know that we will see you, I hope that we  
4 will see you a lot in the future and wish you the best of  
5 luck.

6 COMMISSIONER BYRON: Thank you, Commissioners. I  
7 think I'm prohibited from appearing before this Commission  
8 for a year or so. Right, Mr. Levy?

9 GENERAL COUNSEL LEVY: It's complex, but for  
10 compensation you're prohibited for a year.

11 COMMISSIONER BYRON: Okay.

12 COMMISSIONER DOUGLAS: But that doesn't mean he  
13 can't be here.

14 GENERAL COUNSEL LEVY: Unless you're representing  
15 the PUC or something.

16 COMMISSIONER BOYD: You can appear in front of us  
17 any time you'd like, so to speak.

18 CHAIRPERSON WEISENMILLER: And I, also, wanted to  
19 take the opportunity to thank Thom for his long years of  
20 public service. This is my third time at the Commission and  
21 Thom has been a fixture each of the times.

22 Certainly, I remember when I was leaving the first  
23 time Thom assured me he was going to stick around for about  
24 another year, and then move on, but his math got a little  
25 faulty along the lines, I think for this agency's advantage.

1           But certainly have appreciated the opportunity to  
2 work with Thom, now, for at least parts of these -- of your  
3 long tenure here.

4           So, Chief Counsel's report?

5           GENERAL COUNSEL LEVY: Just a brief, let you know,  
6 at least three of you will find this interesting, probably  
7 four of you. New chief -- Assistant Chief Counsel Jeff  
8 Ogata started yesterday. He's the Assistant Chief for  
9 Siting Activities, so you'll see a new face around on the  
10 siting side of things.

11           COMMISSIONER BOYD: And you did warn him, right?

12           GENERAL COUNSEL LEVY: Thoroughly. He comes back  
13 to the Commission after about ten years. He worked at the  
14 Water Board for three years, he was with the Department of  
15 Justice for a spell, and he was also at Legal Services. So,  
16 he has a long history on all sides of the ethical wall, and  
17 he's very bright and talented, and he's very happy to be  
18 back.

19           CHAIRPERSON WEISENMILLER: Executive Director's  
20 report.

21           ASSISTANT EXECUTIVE DIRECTOR KELLY: I suppose I  
22 should have one parting shot.

23           [Laughter]

24           ASSISTANT EXECUTIVE DIRECTOR KELLY: Maybe three.

25           COMMISSIONER BOYD: Since you're really not coming

1 back, you can now say what you want.

2 ASSISTANT EXECUTIVE DIRECTOR KELLY: Yes. What  
3 are they going to do, fire me?

4 So, I came to the Commission and I was going to  
5 stay here only four or five years. Chairman Weisenmiller's  
6 right, it was in my plan to leave because it was widely held  
7 in the academic circles, in which I ran around, the public  
8 service kills brain cells and lowers IQ. And they figured  
9 that after only four or five years after that you're  
10 worthless in creativity in research and you might as well  
11 just hang up your shield and go away.

12 Something happened, I lost them faster than that,  
13 so I forgot to leave and I'm still here.

14 I think Commissioner Boyd need not worry because  
15 he started with more brain cells than I did, so it's okay.

16 Today, when I have to think, I rub the two  
17 remaining cells real hard and something usually pops out.

18 Two things come to mind from the old days, with  
19 seeing you here and being down here at this table again, in  
20 the old days we held business meetings until they were done,  
21 from public participation. And we had no committees at the  
22 time, so a lot of preparatory work could not take place, and  
23 it was all done here in the public eye. And we would go  
24 into the evening. All day, start at nine o'clock and we  
25 would end at, sometimes, 9:00 or 10:00 o'clock. Midnight

1 was not infrequent, and I was there at the record 2:00 a.m.  
2 meeting, it was really amazing.

3 At that time I was at a meeting where it was about  
4 seven o'clock at night, people wanted to take a break for  
5 dinner, he was the last person to speak and so he started  
6 speaking and a couple of Commissioners got up to head over  
7 to get some water, or go to the bathroom or something, and  
8 he said, "Stop, what I have to say is very important. I  
9 have a bomb in my briefcase and I want you to sit down and  
10 listen."

11 And that was kind of exciting, so I ran out and  
12 called 911. Of course, I just did it to save everybody, not  
13 just to save myself. But we had no cell phones at that time  
14 and I was the first one to the phone, tell you what.

15 So, that was an interesting event. Thank goodness  
16 we don't have either of those kinds of things happen again,  
17 because it wouldn't make life tolerable.

18 Now, I'll reveal to you, I don't reveal to the  
19 staff, but I will reveal here, my surgery is not really for  
20 my hip. Kaiser is going to get the Energy Commission off my  
21 back.

22 [Laughter]

23 ASSISTANT EXECUTIVE DIRECTOR KELLY: And with  
24 that, thank you for 36 good years of service, I've enjoyed  
25 it, it's been a blast.

1                   CHAIRPERSON WEISENMILLER: Thank you, Thom.  
2                   Public Adviser's report.  
3                   PUBLIC ADVISER JENNINGS: I don't have an official  
4 report, but I would like to add my thanks to Commissioner  
5 Byron. We spent a lot of time together at the siting cases  
6 over this past year and I've always been very impressed by  
7 the courtesy and patience that he showed the public, and it  
8 certainly makes my job a lot easier when dealing with the  
9 members of the public when the Commissioners are so  
10 courteous to them. And I thank you for that.  
11                   COMMISSIONER BYRON: Thank you.  
12                   CHAIRPERSON WEISENMILLER: Any public comment?  
13                   Then this meeting is adjourned, thank you.  
14                   (Thereupon, the Business Meeting was adjourned  
15 at 11:55 a.m.)

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